IN THE CLAIMS:

Claim 1 has been amended herein. All of the pending claims 1 through 36 are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of Claims:

1. (Currently amended) A method for crystallizing epsilon polymorph ~~2,4,6,8,10,12-hexanito-2,4,6,8,10,12-hexaazatetracyclo[5.5.0.$0^{5,9}0^{3,11}$]-dodecane~~ 2,4,6,8,10,12-hexanitro-2,4,6,8,10,12-hexaazatetracyclo[5.5.0.$0^{5,9}0^{3,11}$]-dodecane (CL-20), comprising:

preparing a substantially dry CL-20 solvent solution containing an amount of CL-20 dissolved in a CL-20 solvent;

providing a crystallizer containing a CL-20 non-solvent;

adding the substantially dry solvent solution to the crystallizer containing the CL-20 non-solvent to cause precipitation of epsilon polymorph CL-20 crystals by inverse precipitation technique; and

separating the precipitated epsilon polymorph CL-20 crystals from the CL-20 non-solvent and the CL-20 solvent.

2. (Previously presented) The method according to claim 1, wherein preparing the substantially dry CL-20 solvent solution comprises substantially drying a wet CL-20 solvent solution containing the amount of CL-20 dissolved in the CL-20 solvent.

3. (Previously presented) The method according to claim 2, wherein substantially drying the wet CL-20 solvent solution comprises azeotropic distillation to remove an azeotrope comprising water and the CL-20 solvent.

4. (Previously presented) The method according to claim 1, wherein the substantially dry CL-20 solvent solution contains less than 1.5 weight percent water.

5. (Previously presented) The method according to claim 1, wherein the CL-20 solvent comprises at least one member selected from the group consisting of ethyl acetate, methyl acetate, isopropyl acetate, butyl acetate, tetrahydrofuran, and methyl ethyl ketone.

6. (Previously presented) The method according to claim 1, wherein the CL-20 solvent comprises ethyl acetate.

7. (Previously presented) The method according to claim 1, wherein the solubility of CL-20 in the CL-20 solvent is greater than 20 percent weight/volume (g/ml).

8. (Previously presented) The method according to claim 1, wherein the CL-20 non-solvent is free of halogens.

9. (Previously presented) The method according to claim 1, wherein the CL-20 non-solvent is free of chlorine.

10. (Previously presented) The method according to claim 1, wherein the CL-20 non-solvent comprises at least one member selected from the group consisting of hexane, cycloheptane, heptane, octane, benzene, toluene, and xylene.

11. (Previously presented) The method according to claim 1, wherein separating the precipitated epsilon polymorph CL-20 crystals from the non-solvent and the solvent comprises filtration.

12. (Previously presented) The method according to claim 1, wherein the precipitated epsilon polymorph CL-20 crystals comprise particles having maximum diameters of, on average, about 40 μm to about 70 μm.

13. (Previously presented) The method according to claim 1, further comprising adding a co-non-solvent to a wet CL-20 solvent solution or the substantially dry solvent solution, the co-non-solvent comprising at least one member selected from the group consisting of naphthenic oil, paraffinic oil, benzyl formate, and poly(propylene glycol).

14. (Previously presented) The method according to claim 13, wherein a weight ratio of co-non-solvent to the CL-20 non-solvent is in a range of from about 5:95 to about 20:80.

15. (Previously presented) The method according to claim 1, further comprising preparing the CL-20 from 2,6,8,12-tetraacetyl-2,4,6,8,10,12-hexaazatetracyclo-[5.5.0.$0^{5,9}0^{3,11}$] -dodecane (TADA).

16. (Previously presented) The method according to claim 1, further comprising, subsequent to separating, washing the precipitated epsilon polymorph CL-20 crystals with at least one member selected from the group consisting of isopropanol and ethanol, and washing the precipitated epsilon polymorph CL-20 crystals with water.

17. (Previously presented) A method for crystallizing epsilon polymorph 2,4,6,8,10,12-hexanitro-2,4,6,8,10,12-hexaazatetracyclo[5.5.0.$0^{5,9}0^{3,11}$]-dodecane (CL-20), comprising:

dissolving an amount of CL-20 into a solution containing a CL-20 solvent and water to form an aqueous phase and a wet CL-20 solvent phase, wherein the CL-20 is dissolved in the wet CL-20 solvent phase;

substantially drying the wet CL-20 solvent phase to form a substantially dry solvent solution containing the CL-20;

adding a base to the wet CL-20 solvent phase to neutralize acidic species;

providing a crystallizer containing a CL-20 non-solvent;

adding the substantially dry solvent solution to the crystallizer containing the CL-20 non-solvent to cause precipitation of epsilon polymorph CL-20 crystals by inverse precipitation technique; and

separating the precipitated epsilon polymorph CL-20 crystals from the CL-20 non-solvent and the CL-20 solvent.

18. (Previously presented) The method according to claim 17, wherein the base comprises at least one member selected from the group consisting of Na_2CO_3, K_2CO_3, $NaHCO_3$, $KHCO_3$, NaOH, and KOH.

19. (Previously presented) The method according to claim 17, wherein substantially drying the wet CL-20 solvent phase comprises azeotropic distillation to remove an azeotrope comprising water and the CL-20 solvent.

20. (Previously presented) The method according to claim 19, wherein the dry solvent solution contains less than 1.5 weight percent water.

21. (Previously presented) A method for crystallizing epsilon polymorph 2,4,6,8,10,12-hexanitro-2,4,6,8,10,12-hexaazatetracyclo[5.5.0.$0^{5,9}0^{3,11}$]-dodecane (CL-20), comprising:

preparing a substantially dry CL-20 solvent solution containing an amount of CL-20 dissolved in a solvent;

providing a crystallizer containing a CL-20 non-solvent and seed crystals of epsilon polymorph CL-20;

adding the substantially dry CL-20 solvent solution to the crystallizer containing the CL-20 non-solvent and the seed crystals of the epsilon polymorph CL-20 to cause precipitation of epsilon polymorph CL-20 crystals by inverse precipitation technique; and

separating the precipitated epsilon polymorph CL-20 crystals from the CL-20 non-solvent and the solvent.

22. (Previously presented) The method according to claim 21, wherein preparing the substantially dry CL-20 solvent solution comprises substantially drying a wet CL-20 solvent solution containing the amount of CL-20 dissolved in the solvent.

23. (Previously presented) The method according to claim 22, wherein substantially drying the wet CL-20 solvent solution comprises azeotropic distillation to remove an azeotrope comprising water and the solvent.

24. (Previously presented) The method according to claim 21, wherein the substantially dry CL-20 solvent solution contains less than 1.5 weight percent water.

25. (Previously presented) The method according to claim 21, wherein the solvent comprises at least one member selected from the group consisting of ethyl acetate, methyl acetate, isopropyl acetate, butyl acetate, tetrahydrofuran, and methyl ethyl ketone.

26. (Previously presented) The method according to claim 21, wherein the solvent comprises ethyl acetate.

27. (Previously presented) The method according to claim 21, wherein the solubility of CL-20 in the solvent is greater than 20 percent weight/volume (g/ml).

28. (Previously presented) The method according to claim 21, wherein the CL-20 non-solvent is free of halogens.

29. (Previously presented) The method according to claim 21, wherein the CL-20 non-solvent is free of chlorine.

30. (Previously presented) The method according to claim 21, wherein the CL-20 non-solvent comprises at least one member selected from the group consisting of hexane, cycloheptane, heptane, octane, benzene, toluene, and xylene.

31. (Previously presented) The method according to claim 21, wherein separating the precipitated epsilon polymorph CL-20 crystals from the CL-20 non-solvent and the solvent comprises filtration.

32. (Previously presented) The method according to claim 21, wherein the precipitated epsilon polymorph CL-20 crystals comprise particles having maximum diameters of, on average, about 40 μm to about 70 μm.

33. (Previously presented) The method according to claim 21, further comprising adding a co-non-solvent to a wet CL-20 solvent solution or the substantially dry CL-20 solvent solution, the co-non-solvent comprising at least one member selected from the group consisting of naphthenic oil, paraffinic oil, benzyl formate, and poly(propylene glycol).

34. (Previously presented) The method according to claim 33, wherein a weight ratio of co-non-solvent to CL-20 non-solvent is in a range of from about 5:95 to about 20:80.

35. (Previously presented) The method according to claim 21, further comprising preparing the CL-20 from 2,6,8,12-tetraacetyl-2,4,6,8,10,12-hexaazatetracyclo-[5.5.0.$0^{5,9}0^{3,11}$] -dodecane (TADA).

36. (Previously presented) The method according to claim 21, further comprising, subsequent to separating, washing the precipitated epsilon polymorph CL-20 crystals with at least one member selected from the group consisting of isopropanol and ethanol, and washing the precipitated epsilon polymorph CL-20 crystals with water.